

NEVSKY, W. P.

1929. The plant lice of Middle Asia III. Zoologischer Anzeiger, vol. 82, p. 197.

PASSERINI, G.

1857. Gli Afidi. (Photo copy from Dr. Hans Sachtleben, Berlin, Germany). Estratto dal giornale i GIARDINI, fasc. XII, giugno, pp. 1-20.  
1860. Gli Afidi Con Un Prospetto Dei Generi Ed Alcune Specie Nuove Italiane, pp. 1-40.

PATCH, E. M.

1938. Food-plant catalogue of the Aphids of the World, including the Phylloxeridae. University of Maine, Maine Agric. Expt. Sta., Bul. 393, pp. 35-421.

SCHRANK, FRANZ VON PAULA

1801. Fauna Boica. Zweiter Band, p. 107.

THEOBALD, F. V.

1925. New and little-known aphides. Ent. Mo. Mag. 61, p. 75.  
1926. The Plant Lice or Aphididae of Great Britain, vol. I. p. 186.  
1929. The Plant Lice or Aphididae of Great Britain, vol. III, p. 145.

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## CUTEREBRA LATIFRONS REARED FROM NEOTOMA FUSCIPES MACROTIS

(Diptera: Cuterebridae)

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On April 16, 1952, a young wood rat, *Neotoma fuscipes macrotis* Thomas, was captured and brought to the laboratory alive. The collection was made in San Timoteo Canyon, Riverside County, California at a point eleven miles southeast of Redlands. When captured, the young rat was found to be parasitized by four warbles. Three were located on the ventral aspect of the neck and shoulders, one on the postero-superior aspect of the hind leg. The animal was reared, as described below. Three larvae pupated April 27, 29 and 30. On April 30 the animal was anesthetized and the fourth warble excised; this specimen was preserved in 75% alcohol. Adult cuterebrids emerged as follows: one male on June 3, the two females on August 15 and September 5.

*Rearing Technique*—Immediately after capture, the young rat was placed in an Army Medical School Model rat cage (fig. 1). The bottom tray was covered with moist sand to a depth of one inch. As the larvae matured and left the animal, they fell through

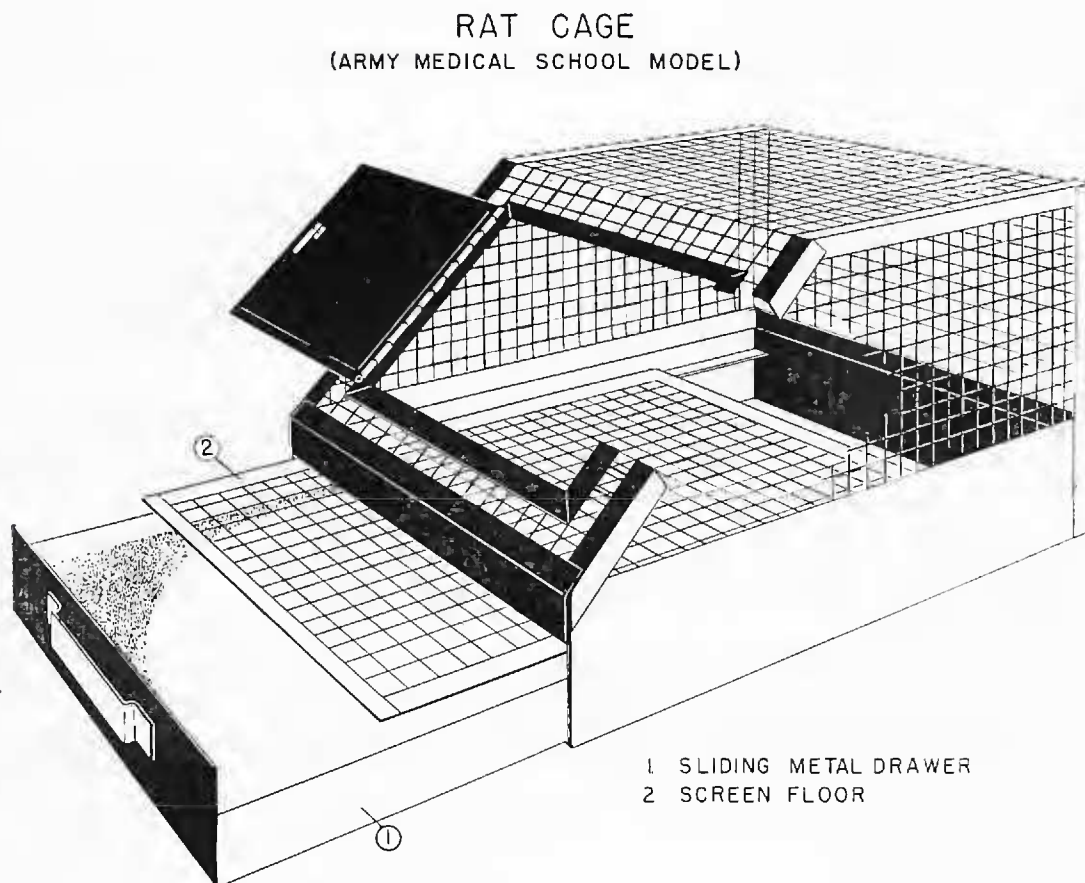


Fig. 1. Type of rat cage used in obtaining puparia of *Cuterebra*.

the coarse screen grating into the sand and pupated. Wood rats are insectivorous and it is important to protect the larvae from the rats.

Pupae recovered from the sand were placed in pint jars containing two inches of slightly moistened sand. The mouths of the jars were covered with muslin in order to retain the flies. After emergence each fly was pinned with its puparium.

The author has found, as did Beamer, Penner and Hibbard (1943), that wounds produced by warbles heal quickly and with little disturbance to the host rat.

The reared specimens have been deposited in the U.S. National Museum, where they were identified by C. W. Sabrosky as *C. latifrons* Coquillett. In a personal communication, he states that "This is the first we have and the first we know of associated with the puparium."

#### LITERATURE CITED

BEAMER, R. H., PENNER, L. R. and HIBBARD, C. W.

1943. Some notes on the biology of the pack rat cuterebrid (Cuterebrid [sic!] beameri Hall) in Kansas. Journal of the Kansas Entomological Society, 16 (2): 47-50, incl. 1 pl.